

**What a Dreadnought Costs.**  
Some idea of the fighting power of a Dreadnought may be gathered from the fact that the extreme range of its guns is twenty-five miles, while they can be very effective at a range of twelve miles. They are most deadly, however, at a range of between five or six miles.

The twelve inch gun of a Dreadnought is fifty feet long and if set up on an end would be higher than many a country church tower. The cost of each gun is about £10,000, while each time it is fired £100 vanishes into the air.

As a protection against the guns of the enemy a Dreadnought is covered with armor costing £120 per ton, and as something like 4,800 tons are used in covering the vessel this means an expenditure of close upon £600,000.

Bollers and machinery at £325,000, motor and steamboats at £8,000, torpedo tubes at £3,000 each and torpedoes at £500 each, and £50,000 for searchlights and electrical fittings are other items in the bill which go to make a Dreadnought the costliest vessel afloat.—Pearson's.

**Sees and the Kilt.**  
In his book, "Forty-one Years in India," Lord Roberts tells the following amusing story:

"A curious incident happened at the Alambagh. I was employed inside the inclosure when all at once I heard a noise and commotion some little distance off. Getting on to the roof, I looked over the plain and saw our troops flying in every direction. There was no firing, no enemy in sight, but evidently something was wrong; so I mounted my horse and rode to the scene of confusion, where I found that the ignominious flight of our troops was caused by infuriated bees, which had been disturbed by an officer of the Ninth lancers thoughtlessly thrusting a lance into their nest. There were no serious consequences, but the highlanders were heard to remark on the unsuitability of their dress for an encounter with an enemy of that description."

**A Tinker Inspired Wagner.**  
A tinker has established himself opposite our house and stunned my ears all day long with his incessant hammering. In my disgust at never being able to find a detached house protected from every kind of noise I was on the point of deciding to give up composing altogether until the time when this indispensable condition should be fulfilled. But it was precisely my rage over the tinker that, in a moment of agitation, gave me the theme for Siegfried's furious outburst against the bungling Mime. I played over the childishly quarrelsome Polter theme in G minor to my sister, furiously singing the words at the same time, which made us all laugh so much that I decided to make one more effort. This resulted in my writing down a good part of the first scene by the time Liszt arrived, Oct. 15 (1856).—Richard Wagner in His Autobiography.

**Recreation and Mental Disease.**  
The problem of fatigue and its relation to efficiency is becoming more and more appreciated in our industrial institutions, so much so, indeed, that we may truthfully say that in the United States at least, the art of work is being mastered to a degree little short of perfection. Not so much can be said with reference to our mastery of the art of play. Let us not forget that the art of play presents an important problem which requires serious effort for its solution. Relaxation from the stress and tension of modern American city life means much for our future physical, mental and moral health and efficiency. This is a tired nation, perhaps the most tired nation on earth.—New York Medical Journal.

**British Life Guards.**  
England's famous life guards were organized just after the restoration. They were recruited from the old cavaliers who fought for Prince Charles Stuart, and in 1661 they were formed into three troops, then known as the King's Own, the Duke of York's and the Duke of Albemarle's. At that time it was always demanded that one troop should be raised in Scotland in honor of the house of Stuart.—London Tit-Bits.

**One Way to Use a Poultice.**  
"Did that onion poultice I sent you do you any good?"  
"Did me a heap of good."  
"These external applications are often efficacious."  
"I applied it internally. The onions smelled so good that I ate it!"—Kansas City Journal.

**Horse's Sense.**  
The phrase "horse sense" was discussed in class, and the teacher told one of the boys to write a sentence containing that phrase. The boy labored for ten minutes and produced this, "My father didn't look the barn door, and he ain't seen the horse sense."

**Peter the Great.**  
What Alfred the Great is to early Britain that Peter the Great, in his crude way, is to Russia. If ever a race of people found adequate expression in one person that race was the Slavic race in their great czar.—Century Magazine.

**Hardy Ants.**  
Ants can stand extremes of heat or cold. Forty-eight hours' exposure to frost will not kill them, and one sort has been observed to build its nest in the depths of a mountain's core.

**Hope Springs** exulting on triumphant wing.—Barnes.

**A Billion Dollars.**  
"I wonder if we realize when we talk of a billion dollars what an enormous sum of money it means. We all know how rapidly an expert counter of coins will manipulate them. You can scarcely follow the motion of his fingers as he shifts the coins from one pile to another and counts them. The treasury experts will count 4,000 silver dollars in an hour and keep it up all day long, but that is their limit."

"Working eight hours a day, then, an expert counter of coins will count \$2,000 silver dollars in a day, but how long will it take him at that rate to count a million dollars? Thirty-one days. But that is only the beginning of the measurements of great figures, for if this same man were to go on counting silver dollars at the same rate of speed for ten years he would find that he had counted 100,000,000 of them and that to count a billion dollars would require 102 years of steady work at the rate of eight hours a day during every working day of every one of the 102 years."—O. P. Austin, Former Chief of the Bureau of Statistics.

**At Night in Africa.**  
Stewart Edward White, writing in the American Magazine on lion adventures, comments as follows on the ravages of wild animals in Africa after nightfall:

"We spent the short evening each in his own fashion, I in my canvas chair smoking, the men squatted on their heels around their tiny fires eating quantities of meat and corn meal. Outside our little dome of light the night businesses of the veldt went forward. Only the most formidable or the most insignificant creatures raised their voices except in alarm or warning. Lions roared; insects hummed and chirped. Out there in the dark was a different world from that in which we moved so freely during the daylight hours—a dangerous, tragic world. Next day we would find evidences of the fact. I have seen killed by lions the remains of every sort of creature except buffalo and rhinoceros. Lions are said occasionally to kill even buffalo, though rarely."

**His Idea of the Best Soap.**  
The Flemish peasant, writes a correspondent, has no more aversion to water than the English peasant. I happen to know a good deal about both of them. There is, naturally, a kinship between the Flemish and Dutch and Dutch are universally regarded as among the most cleanly of peoples, at any rate where domestic affairs are concerned. The amount of scrubbing and house washing that goes on in the villages of Flanders and the rest of Belgium would be regarded as silly by English villagers. And, from the childlike quarrelsome Polter theme in G minor to my sister, furiously singing the words at the same time, which made us all laugh so much that I decided to make one more effort. This resulted in my writing down a good part of the first scene by the time Liszt arrived, Oct. 15 (1856).—Richard Wagner in His Autobiography.

**When the Kilt Was Barred.**  
At one time the kilt was forbidden. It is interesting to recall the words of the oath that was administered at Fort William and elsewhere in the Highlands in 1747-8: "I, —, do swear, as I shall answer to God at the great day of judgment, that I have not, nor shall have, in my possession any gun, sword, pistol or any arm whatsoever, and that I never use tartan, plaid or any part of the Highland garb, and if I do so may I be cursed in my undertakings, family and property—may I never see my wife and children, father, mother or relations—may I be killed in battle as a coward and lie without Christian burial in a strange land, far from the graves of my forefathers and kindred; may all this come across me if I break my oath."—London Chronicle.

**Points on Carving.**  
The expert carver should choose a chair which brings the arms just a few inches above the seat to be carved and make the movements easy and natural. The platter should be large enough to hold the entire bird or joint, placed near enough to the carver to bring the center of the knife blade over the fowl when the carver's arms are extended and slightly bent at the elbows. The carving knife should have a uniform edge moderately sharp and slightly rough or ragged. The raw edge is better for cutting meat than a smooth edge.—Washington Star.

**Elizabeth Fry.**  
Elizabeth Fry's great work for prison reform was all done after her marriage. It was in 1813 that she paid her first and memorable visit to Newgate prison and in 1817 formed the Association for the Improvement of Female Prisoners in Newgate, which attracted such widespread interest. Her efforts were not confined to Great Britain, many continental prisons being the better for her labors.—London Mail.

**Animals and Cold.**  
Of domestic animals sheep come first as cold resisters. Sheep have lived for weeks buried in snow. When the great blizzard of March, 1891, swept Devonshire sheep were dug out alive from the enormous drifts twenty-four days later. Goats and pigs take respectively second and third places.

**A Mother's Pride.**  
Pride, said Charles Dickens, is one of the seven deadly sins, but it cannot be the pride of a mother in her children, for that is a compound of two cardinal virtues—faith and hope.

**There is no being fainter** for keeping the mind steady on his hat and saving it from all risk of croakiness than business.—Lowell.

**Wireless in the Amazon Region.**  
In the Joamara region of the Amazon the natives use a crude system of wireless telegraphy, which, it is claimed, has been in operation for thousands of years. The transmitter found by an explorer was a hollowed trunk of a tree suspended from a horizontal pole stretched between two stumps. Inside the transmitter had been arranged much like a violin, and it was explained that when the instrument was struck smartly with a small rubber hammer a vibration was created that carried for miles over the hills. The receiver is very similar to the transmitter, except that it is placed on a hardwood platform, the base of the hollowed tree trunk being grounded on the platform. When the message is struck in the neighboring village, sometimes thirty miles away, this receiver catches the vibrations, causing a jerky, singing sound. The sound system, it is said, can be read by the members of the tribe, and in this way news of victories and other happenings are told throughout the countryside.—Argonaut.

**Washing Day in Sicily.**  
The Sicilians have the reputation of not washing themselves overfrequently, but if they are remiss in this respect they more than make up for it by washing their garments—washing, in fact, being a perennial occupation among the women. The songs of the women folk as they scrub the clothes of their husbands and children outside the doors of their homes, if living in a city, or in some brook or running stream, if living in the country, are a noticeable feature of lower class Sicilian life.

The long spikes on the prickly pear leaves and aloe plants make splendid natural pegs on which to dry the clothes, and in all the rural districts you will see them thus utilized, but if they do not happen to be sufficiently handy the clothes are often stretched out upon the mountain side to dry. The occupation and recreation of most of the poorer women may be summed up in three words—washing and gossip.—Wide World Magazine.

**The Star Alcyone.**  
The size of the star Alcyone and its distance from the sun are both unknown and, so far as can now be seen, must remain unknown. It has no parallax large enough to be measured by the most accurate modern micrometric methods.

That is, take a large telescope with you, go to Alcyone, turn, look back this way, then the entire diameter of the orbit of the earth around the sun, a huge ellipse, 185,765,000 miles in diameter, if a bright line in space so that it could be seen, would appear to be so small that the telemicroscope could not measure it. Not knowing the distance, the size cannot be known.

But, judging from its light when compared with that of other stars whose distances are fairly well known, it must be colossal—many times larger than our medium sized star, the sun.—New York American.

**Art Criticism.**  
It is related that almost the last work Sir Edwin Landseer was engaged on was a life sized picture of Neil Gwyn passing through an archway on a white palfrey. This picture, in which the horse alone was finished, was bought by one of the Rothschild family and given to Sir John Millais to complete. One morning a celebrated art critic called on the painter and was much impressed by this work. "Ah, to be sure," he said, going up close and examining a deerhound in the foreground of the picture; "how easily one can recognize Landseer's dogs! Wonderful, isn't it?" "Yes; it is wonderful!" said Sir John, lighting his pipe. "I finished painting that dog yesterday morning and have done the whole of it myself."

**German Army Shoes.**  
Leather used for German army shoes is the result of many tests. It is rather dry compared with American vegetable tanned leather. However, it is made dry so that the oxidizing oils and fats will not rot the leather fiber during the many years that it may be held in storage. Every soldier when he gets his army shoes also gets a can of shoe dressing, with which he dresses his shoes. This keeps them pliable and water resisting. The boots are crimped. They have only two seams. They are practically water tight. The thread used for stitching them is hand waxed. The absence of blackings of any nature tends to save the life of the boot. It rejects the sun's rays too.—Hilde and Leather.

**Argentina's Natural Bridge.**  
In Argentina there is a natural bridge that is one of the most wonderful in the world. It spans the Rio Mendoza and is known as the Inca bridge. It is the work of nature and not, as was once popularly supposed, of the Incas. The road on which it occurs was probably a highway made by the Peruvian Incas, who took advantage of the phenomenon by leading their road over this natural viaduct.

**A Prosperous Scheme.**  
"Doing any good?"  
"Yep. Got a business man's athletic class. Tuition, \$5 a year."  
"Well, those rates are attractive, but too low to pay you."  
"You don't get the idea. They all drop out in about two weeks. Then I start another class."—Judge.

**Mush Traveled.**  
First Tourist—Did you ever see the Catskill mountains? Second Tourist—No, never, but I have seen them all signs.

**Family Glee** had, in some instances, been observed in the same.—Blowdown.

**Strength of Insects.**  
The insects are provided with muscles of enormous power as compared with men. If a fly be held by the wings it can pick up and carry a match, and this is as if a man were able to pick up a beam twenty-eight feet long and fifteen and one-half inches square.

An ordinary little ant can pull eight matches on rollers, which would equal a load of 350 beams the size of a man when its weight is compared with that of a horse.

The flea jumps 200 times its own height, which is about the same as if a man were to jump over the nearly thousand foot high Eiffel tower.

An oyster opposes being opened by exerting a force of over thirty pounds, and for a man to show the same power he would have to take up eighty large locomotives and bear them Atlas-like upon his shoulders.

**The Yosemite.**  
The best authorities have now agreed upon the spelling of Yosemite as recorded in Hodge's "Handbook of the American Indians." The following forms have been employed in various publications: Osemita, Oosomite, Sosemitex, Sosemita, Yasecme, Yoamity, Yohamite, Yohamitita, Yosemite, Yosemite, Yosemite, Yosemite and Yoseumite. It never was used by the Indians as the name of the valley, for the Awan division of the Miwok tribe, who made their home in the valley, called their principal village and the whole valley by their name Awan. The name Yosemite may have derived from the Awan village of Lesamait, but Powers regards it as a distortion of the Miwok word *uzumait*, meaning grizzly bear.—New York Sun.

**The Squirrel.**  
Innocent in all his ways, harmless in his food, playful as a kitten, but without cruelty, and surpassing the fantastic dexterity of the monkey, with the grace and brightness of a bird, the little dark eyed miracle of the forest glances from branch to branch, more like a sunbeam than a living creature. It leaps and darts and twines where it will. A chamois is slow to it and a panther clumsy. Grotesque as a gnome, gentle as a fairy, delicate as the silken plumes of the rufous, beautiful and strong like the spiral of a fern, it haunts you, listens for you, hides from you, looks for you, loves you, as if the angel that walks with your children had made it himself for a heavenly plaything.—John Ruskin.

**Palace of the Popes.**  
The Vatican is the papal palace and derives its name from the hill on which it stands, the Mons Vaticanus, one of the seven hills of Rome. It is a collection of magnificent buildings, which occupy a space of 1,151 by 767 feet. The most ancient of the present structures dates from the time of Nicholas V., about 1447. The various popes from time to time added new buildings, in which are many works of art of a historical character. The Sistine chapel, one of the Vatican edifices, contains Michelangelo's first masterpiece in painting, "The Last Judgment." The Pauline chapel possesses Michelangelo's frescoes of "The Conversion of St. Paul" and "The Crucifixion of St. Peter."

**Troops and Winter.**  
When Napoleon went to Moscow and back it was found that the French soldiers stood the intense cold better than the Poles and north Germans. It is quite wrong, by the way, to suppose, as is often done, that that fatal winter set in early with exceptional severity. Napoleon invented that explanation to palliate the disaster into which he plunged his army. But the autumn was so exceptionally mild that the peasants believed that God was favoring Napoleon, and the first snowstorm did not come until Nov. 6, an unusually late arrival.

**Decorations for Women.**  
There are few decorations for women in Europe, the most ancient order coming from the Austrian throne. It is the decoration of the Star and Cross and is given to women of high rank. Another is the Luise, founded in memory of the beautiful queen of Prussia whom Napoleon insulted. This order is given to all classes of women who subject themselves to any great self sacrifice.

**To Clean Watch Chains.**  
Gold or silver watch chains can be cleaned with a very excellent result, no matter whether they be matt or polished, by laying them for a few seconds in pure aqua ammonia. They are then rinsed in alcohol and finally shaken in clean sawdust free from sand.—Medical Herald.

**Naval Mines.**  
The first recorded appearance of mines as instruments of naval warfare was at the siege of Antwerp in 1585, when they were employed by the Dutch against the Spaniards.

**Took the Hint.**  
A weariest young lady hastened the departure of a tedious caller by remarking as she looked out of the window, "I think we are going to have a beautiful sunrise."

**Reverse Conditions.**  
Fishman—I say, old man, I'd like change for a five. De Brute—Would you? I'd like five for a change.—Boston Transcript.

**Stars in the Daytime.**  
"Where are the stars in the daytime?" a child asked, and the wise man said:

"The stars in the daytime are just where they are at night, and if something could be put over the sun we should see them again. Something is put over the sun sometimes, for the moon comes in the way, so that for a time he cannot be seen, even though it is daytime and there are no clouds in the sky. When that happens one of the most wonderful things in the world is to see the stars 'come out again.' They were there all the time, shining as brightly as ever, but the sun is so very much brighter to us, because he is so very much nearer to us, that we could not see them."

"When you are listening to thunder or to a cannon you do not hear the quiet sound of your own breathing, although the thunder is far away and the breathing is near, and just as the great noise swallows up the little sound so the great light of the sun swallows up the little light of the stars."—Kansas City Star.

**The Falklands.**  
Buried in banks of fog, drenched in drizzling rains, swept by bitter winds from the Antarctic, the Falkland Islands are surely the most dismal of Great Britain's family of organized colonies. The rain ceases only when the wind blows the fiercest, the fog hangs low and heavy except when the gales whip it to shreds. It is a treeless land, part barren rocks and part grassy slopes. A day of sunshine is a rare joy. Tierra del Fuego is its nearest neighbor. The people, some 2,000 in number, are sturdy descendants of Scotch immigrants, and the sheep that browse on the eternally damp hills are their only source of revenue. Yet there is a capital, a government and a governor duly appointed by the crown and sent to suffer virtual exile for a time among the moist shepherds of the antipodes. The Falkland Islands appeal to the imagination as the remotest, loneliest and least desirable of all lands inhabited by Europeans.—Cleveland Plain Dealer.

**Conscription.**  
With the exception of the one occasion in 1863, when the quotas of the states did not fill up as rapidly as desired, there has been no conscription in the United States. The draft riot in New York was the outcome of this conscription, and, as it happened, the muster rolls were filled in the meantime without need of the men originally drafted.

Conscription was ruthless at one time in England. The worst form of conscription was employed in connection with recruiting the navy in Nelson's time. No one was safe from attack by the redoubtable press gangs, and the victories of this glorious epoch of England's history were won in part by men who often kicked and bit and tussled to break away from the gangs that hurried them into the navy.—New York Sun.

**Harder Than Diamonds.**  
Although the diamond is generally regarded as the hardest of all substances, it is a fact that there is a substance even harder. This is a metal known as tantalum, a rare metal, although not one of the rarest. Just how hard it is may be imagined when it is mentioned that a thin sheet of it was once placed under a diamond drill worked day and night for three days. The only effect was a slight indentation in the tantalum and the wearing out of the diamond. Tantalum is very difficult to produce, but when it can be obtained in sufficient quantities it will be an exceedingly useful substance. Among its other uses it will be employed to cut diamonds and to make filaments for electric lamps. It is one of the few substances that are hard without being brittle.

**The "Death Watch."**  
The so called "death watch," with its mysterious ticking at night time, is due to nothing more serious than the furniture beetle. The larva of this insect burrows in the furniture, making the pin holes which are often to be seen in old furniture. It is three years in its pupa condition and at length becomes a little brown insect with a great talent for shamming death, so that it is not very much observed. These beetles often strike the wood of their galleries with their heads, and so produce a ticking sound which is a call to the mate.

**Slightly Sarcastic.**  
"I am convinced that in many respects I resemble George Washington," said the pious man.  
"It seems unfair," replied Miss Cayenne, "that an accident of chronology should have placed you at such a disadvantage. Merely because Washington was born first people say you resemble him instead of saying he resembles you. It really seems unfair."—Washington Star.

**Canadian Provinces.**  
The areas of the nine Canadian provinces in square miles are: Quebec, 706,834; Ontario, 407,323; British Columbia, 357,800; Alberta, 253,540; Saskatchewan, 250,660; Manitoba, 251,323; New Brunswick, 27,925; Nova Scotia, 21,428, and Prince Edward Island, 2,124.

**Magnetic Mountains.**  
The mountains of Porto Rico are so magnetic that they attract surveyors' plumb lines, and it has been found that some old surveys are incorrect by half a mile or more.

**It's a Great School.**  
Daily life is a university; the home is a college; the office, the factory, the farm are high schools, each with more sources than any university can offer.

**A Pretty Compliment.**  
The "three beautiful Miss Gunzings" were in their day—which was after the middle of the eighteenth century—such famous beauties that the London crowd often followed their carriages on the street and fairly mobbed any shop they were known to have entered in the effort to get a sight of them. The handsomest of the trio, worn out by the activities of the London season, stayed for a time in the country near a market town. It was known in the neighborhood that she wished to pass unnoticed and was not well, and her wish was respected. But on the day of her departure from the town there was an unusual number of people at hand to see the coach start. As the lovely lady stepped from the inn door to the step of the coach the branch of a climbing rose caught for a moment in her hair, instantly a voice called from the crowd:

"No names, my lads, and no staring, but three cheers for the queen of beauty that the roses crown of their selves!"

They were given with a will and won the response of a radiant face at the coach window and a gracious hand waving farewell.

**Eggs Hatched in Rice.**  
John Chinaman had a method of hatching eggs artificially many generations before there were any white men in America to begin to think about providing a mechanical substitute for the mother hen. And John Chinaman is still using his ancient method and refuses to purchase the newfangled incubator. The Chinese poultryman takes a quantity of unhusked rice which he has roasted. This is heated until it is lukewarm. A three inch layer of warm rice is spread into a tub, and a layer of eggs is placed thereon. Another layer of rice is added and another layer of eggs and finally a last layer of rice over the fifth layer of eggs. About 500 eggs are placed in a tub. Once each day the eggs are removed, the rice heated and the whole repacked. The tub is kept well covered to keep in the heat. In the course of three or four weeks the chicks put in their appearance.—American Boy.

**How Napoleon Dressed.**  
Napoleon was always simple in his dress and generally wore the uniform of his own guard. He was clearly rather from habit than from liking for cleanliness. He bathed often—sometimes in the middle of the night—because he thought the practice good for his health. But, apart from this, the precipitation with which he did everything did not admit of his clothes being put on carefully, and on gala days and full dress occasions his servants were obliged to consult together as to when they might snatch a moment to dress him.

He could not endure the wearing of ornaments. The slightest constraint was insupportable to him. He would tear off or break anything that gave him the least annoyance.—Memoirs of Mme. de Remusat.

**Pepps and the Otacousticon.**  
As far back as 1638 experiments were being made with what savants called an "otacousticon," which brought distant sounds to the ear and was a faroff promise of the "long distance" and "wireless" messages of today. Samuel Pepps was abroad in those days, and, of course, he saw the new toy, tried it and mentions it in his diary. He went with Lord Brouncker to "the Royal society," and "here, to my great content, I did try the use of the otacousticon, which was only a great glass bottle broke at the bottom, putting the neck to my ear, and there I did plainly hear the dancing of the oars of the boats in the Thames to Arundel gallery window, which without it I could not in the least do."

**Court Room Retort.**  
Two young attorneys were wrangling for a long time before Judge Koot of Virginia over a point of law. His honor rendered his decision, and the sprig who had lost impudently remarked, "Your honor, there is a growing opinion that all the fools are not dead yet." "Certainly," answered the court, with unruffled good humor; "I quite agree with you, Mr. B., and congratulate you upon your healthy appearance."

**Badly Matched.**  
Mrs. Yeast—This paper says the matching of colors has been brought down to an exact science by the invention of a machine for the purpose.  
Mr. Yeast—You ought to get the people who run the store where you buy your hair to get one of those machines dear.—Yonkers Statesman.

**Very Trying.**  
"Dear sir," wrote the anxious mother, "I am afraid Johnny is not trying enough."  
"Dear madam," replied the harassed teacher, "I assure you that Johnny is quite trying enough. He is the most trying boy in the class."

**Power of Beauty.**  
Beauty gets the best of it. Poets, humane organizations, sentimentalists, make a great to-do about the bird that dies to adorn a woman's hat. But who has any sympathy for the hen whose neck is wrung to make a poppet?—Don Marquis.

**A Philippine Custom.**  
When a young woman of the Philippines marries her husband's name is added to her maiden name. If she becomes a widow the husband's name is discarded.

The man who was born with a talent which he is meant to use finds his greatest happiness in using it.—Goethe.